



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/817,256

03/27/2001

Koichi Nihira

1614.1156

7685

21171 7590 06/07/2007  
STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER

JARRETT, SCOTT L

ART UNIT

PAPER NUMBER

3623

MAIL DATE

DELIVERY MODE

06/07/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

09/817,256

**Applicant(s)**

NIHIRA, KOICHI

**Examiner**

Scott L. Jarrett

**Art Unit**

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. This **Final** Office Action is responsive to Applicant's amendment filed March 19, 2007. Applicant's amendment amended claims 1 and 3-12, canceled claim 2 and added claim 13. Currently claims 1 and 3-13 are pending.

***Response to Amendment***

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1 and 3-13 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 3-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gill et al., U.S. Patent No 5,984,178 in view of Zhang, Liping, Service Problem Resolution and Performance Management Process Framework (1998) and further in view of Klemettinen et al., Rule Discovery in Telecommunication Alarm Data (1999).

Regarding Claims 1 and 10-13 Gill et al. teach a method and system for collectively managing management information about a plurality of customer service devices (ATM, automated teller machines, banking machines), and managing the operations of the plurality of customer service devices (Abstract; Column 3, Lines 48-68; Column 4, Lines 1-55; Column 5, Lines 1-54; Column 8, Lines 33-42; Column 25, Lines 5-68; Figures 14, 19, 31, 32 and 56 and as shown below in Figures 1, 4, 7, 8 and 29) comprising:

- registering (entering, storing, defining, etc.) management information in a database/data store (Figure 4, Element 36; Figures 46-59);

- creating (defining, entering, etc.) and registering a plurality of actions corresponding to a condition (event, state, status, fault, etc.) of each device in a database to operate each device by processing the management information (event

management system, fault action window, action procedures, fault codes, fault action tables; Abstract; Column 25, Lines 27-40; Column 26, Lines 1-43; Figures 4, 7, 28-29, 31-32);

- determining based on condition information for each device via a network that an event (fault, error, trigger, etc.) has occurred, a device number (ID, code, identifier, etc.) and a (management) pattern (fault class, fault codes; Column 25, Lines 5-40; Figure 28) corresponding to the management information (fault action window, action procedures, fault codes, fault action tables; Abstract; Column 25, Lines 27-40; Column 26, Lines 1-43; Figures 17, 7, 28-29, 31-32);

- selecting an action, from the database, in accordance with the pattern and the device condition information (Column 11, Lines 62-68; Column 12, Lines 25-44); and

- transmitting an instruction indicative of the selected action for each customer service device (Column 25, Lines 54-65; Figures 31-32);

- wherein the management information includes a plurality of information related to consumer devices, consumer device groups, assignees of management (servicers, vendors, message recipients, contacts), actions, events, schedules and a plurality of other information associated with the operation of the customer service devices (Column 4, Lines 1-55; Column 15, Lines 35-68; Column 16, Lines 1-60; Column 24, Lines 55-68; Figures 11-14, 16, 17 and 46-59; Figures 7 and 8)..

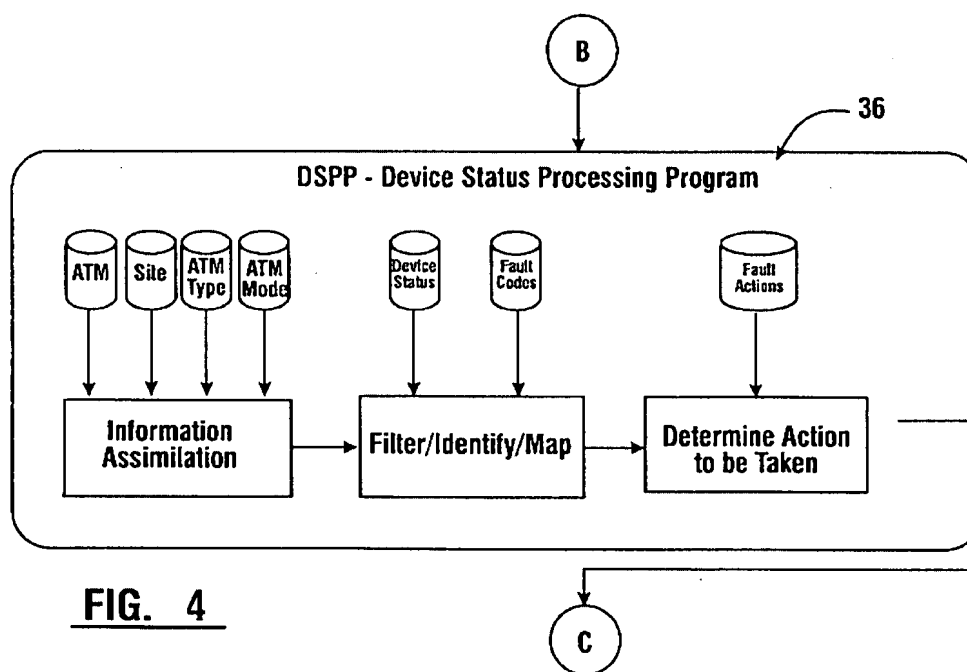
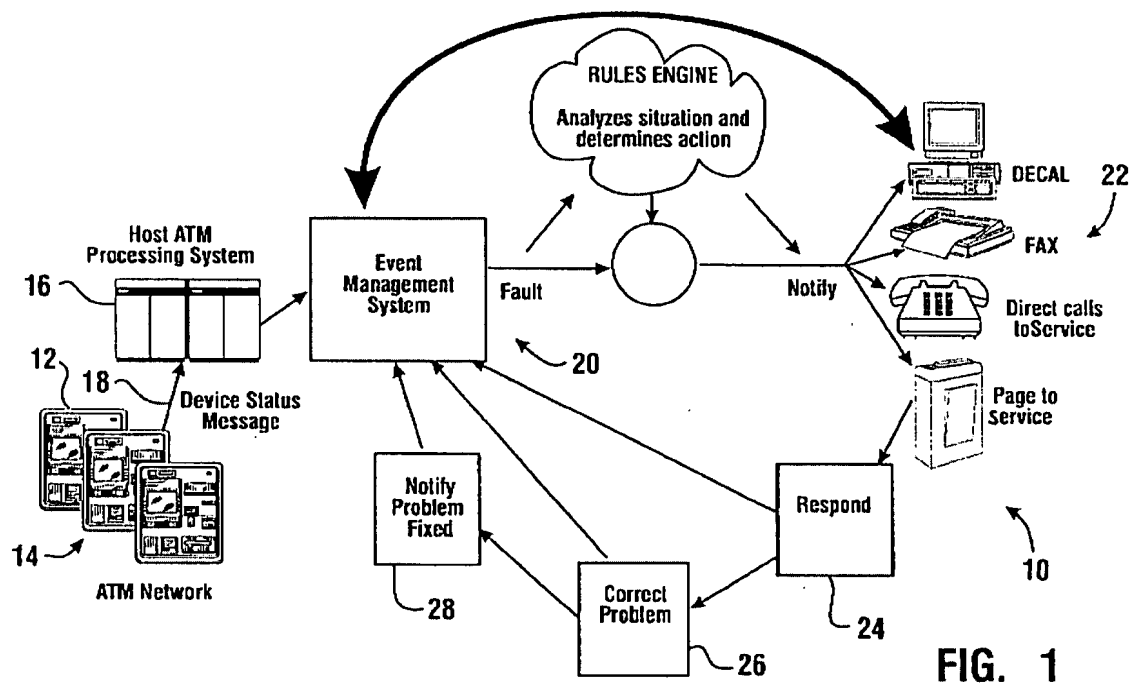
Gill et al. teach a system and method for managing the operations of a plurality of customer service devices further comprises: a data storage; a memory operable to store

Art Unit: 3623

a program, a processing device, an administrative system, a maintenance system, and a management device (Figures 1-2).

Gill et al. further teach that the system and method for collection managing a plurality of consumer devices analyzes a plurality of management information to determine what action (steps) to take wherein the management information includes but is not limited to: consumer device information (location, ID, etc.), customer/operator information (e.g. hours of operation, etc.) and vendor/servicer information (i.e. vendors inherently being outsourced/external service providers that operate under some form of *contract* (written, oral/verbal, agreement, formal, informal, promise, commitment, etc.) and *contracts* inherently include at least information regarding the parties/entities of the contract such as contact information - e.g. who to contact when a specific event occurs on a specific consumer device and by what means as in the case in Gill et al.; Column 3, Lines 1-11; Column 5, Lines 1-10; Column 24, Lines 37-48; Figure 14).

Gill et al. teach that the management system comprises a plurality of systems (sub-systems, modules, applications, devices, etc.) including but not limited to (Figure 1; Figure 2): Automated Teller Machines, ATM Network, Host ATM processing, Event Management System, Rules Engine, Scheduler, Multi Media Reporter (MMR), Message Gateway Router (MGR) and Device Status Processing Program (DSPP) that enable the administration, maintenance and management of customer service devices.



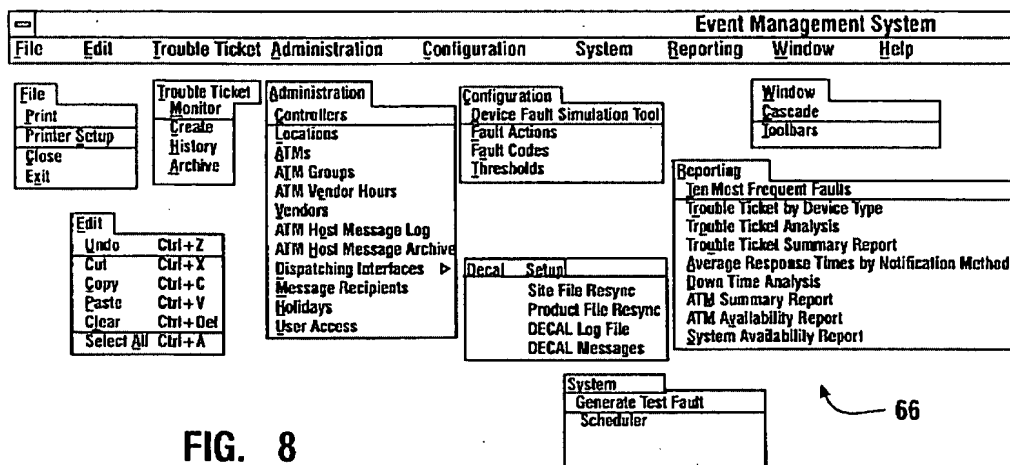
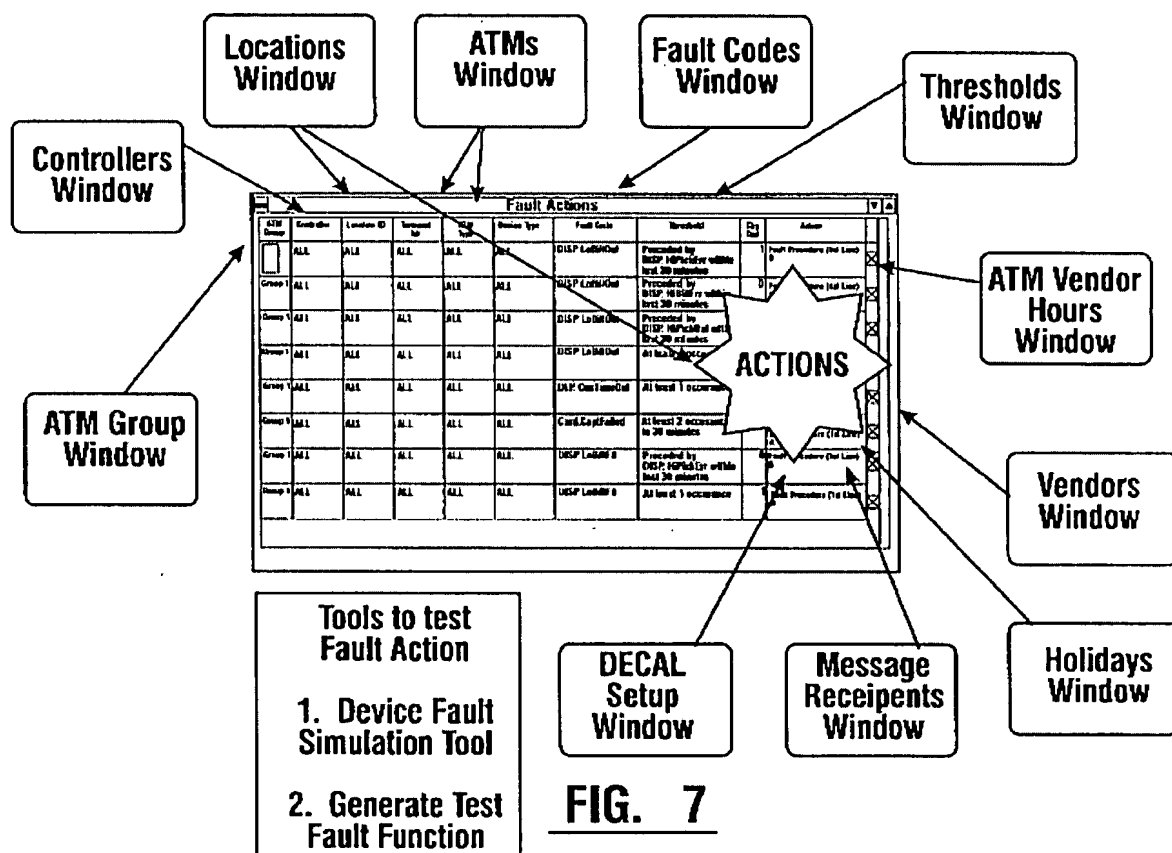


FIG. 8



DATA FIELD NAME	DESCRIPTION
ATM_MODE_DESC	Emulation mode which the ATM is running.
ATM_MODEL_NUMBER	Model number of the ATM.
ATM_SERIAL_NUMBER	Serial number of the ATM.
ATM_SERVICE_GRP_DESC	Name of the ATM group associated with the ATM.
ATM_STATUS_DESC	Indicates the fault monitoring status of the ATM.
ATM_TYPE_DESC	Type of ATM.
CONSUMER_STATUS_DESCRIPTION	Description of the ATM status.
CONTACT_NAME	Point of contact at the site.
DEVICE_ID_DESC	Description of the failed component on the ATM.
DS_CORRECTIVE_ACTION	Device status corrective action.
DS_STATUS_DESCRIPTION	Device status description.
FAULT_CODE	EMS fault code associated with the event.
FAULT_DESCRIPTION	Description of the fault.
FAULT_SHORT_DESCRIPTION	Abbreviated description of the fault.
FC_CORRECTIVE_ACTION	Fault code corrective action.
LUNO	ATM logical unit number.
MESSAGE_TYPE_DESC	Identifies the message as solicited or unsolicited.
NETWORK_ID	Identifies the network associated with the terminal.
PROBLEM_ID	Trouble ticket number generated by the EMS system.
PROBLEM_STATUS	Abbreviated trouble ticket status.
PROBLEM_STATUS_DESC	Description of the trouble ticket status.
SITE_ADDR1	Address where the site is located.
SITE_ADDR2	Holds additional address information.
SITE_CITY	City where the site is located.
SITE_COUNTRY	Country where the site is located.
SITE_ID	System identifier of the site associated with the ATM.
SITE_NAME	Identifies the site where the ATM is located.
SITE_STATE	State where the site is located.
SITE_ZIP_CODE	Zip code of the site location.
STATUS_BYTES	Detailed service status bytes from the fault messages.
STATUS_DATE	Date which the event occurred.
STATUS_TIME	Time which the event occurred.
TERM_ID	Identifies the terminal associated with the event.

**FIG. 17**

Art Unit: 3623

Fault Code			
Fault Code	DISP:HiBillOut		
Fault Class	Supplies Out	Fault Description Voice File	Hi Bills Out
Allow User To Create	No.	Corrective Action Voice File	Place ATM Out of Service. Ch
Device Type	Dispenser		
Operational Status	Operational		
Short Description	HiBills Out		
Fault Description	Atm senses that the Hi side cassette contains no more bills		
Corrective Action	Place the ATM out of service. Check currency in the Hi side cassette, adding currency as needed Send Attention Message or turn supervisory key (911) Place ATM in service		

70/130

106

FIG. 28

Fault Actions									
ATM Group	Controller	Location ID	Terminal ID	ATM Type	Device Type	Fault Code	Thresholds	Chk Ord	Action
Group 1	ALL	ALL	ALL	ALL	ALL	DISP:LoBillOut	Preceded by DISP:HiPickErr within last 30 minutes	1	Fault Procedure (1st Line) B
Group 1	ALL	ALL	ALL	ALL	ALL	DISP:LoBillOut	Preceded by DISP:HiBillIn within last 30 minutes	1	Fault Procedure (1st Line) B
Group 1	ALL	ALL	ALL	ALL	ALL	DISP:LoBillOut	Preceded by: DISP:HiBillOut within last 30 minutes	2	Fault Procedure (1st Line) B
Group 1	ALL	ALL	ALL	ALL	ALL	DISP:LoBillOut	At least 1 occurrence	3	Fault Procedure (1st Line) A
Group 1	ALL	ALL	ALL	ALL	ALL	DEP:CusTimeOut	At least 1 occurrence	1	Fault Procedure (1st Line) A
Group 1	ALL	ALL	ALL	ALL	ALL	CARD:CapFailed	At least 2 occurrences in the last 30 minutes	0	Fault Procedure (1st Line) A
Group 1	ALL	ALL	ALL	ALL	ALL	DISP:LoBillIn	Preceded by: DISP:HiPickErr within last 30 minutes	0	Fault Procedure (1st Line) B
Group 1	ALL	ALL	ALL	ALL	ALL	DISP:LoBillIn	At least 1 occurrence	1	Fault Procedure (1st Line) A

70/130

108

FIG. 29

Gill et al. does not expressly teach detecting that the occurred event, the device number or the (management) pattern does not match (correlate) with the management information as claimed.

Zhang teaches detecting that the occurred event, the device number or the (management) pattern does not match (correlate) with the management information (Page 33, step 60.0-100.0; Figure 10, steps 60.0, 80.0, 90.0) in an analogous art of monitoring and managing the operations of a plurality of networked devices (service problem resolution; Bullets 2-4, Page 11; Section 2.2, Pages 12-14; Section 2.4, Pages 18-19; Figures 1, 3, 5) for the purposes of analyzing and correlating alarms/events to existing management patterns as well as creating new management patterns when the alarms/events do not match (correlated) with pre-existing management patterns (Page 33, step 60.0-100.0; Figure 10, steps 60.0, 80.0, 90.0).

Zhang teaches a system and method for managing the operations of a plurality of networked devices comprising creating a plurality of management information; creating a plurality of actions corresponding to device conditions, selecting an action based on condition information, device information and a management pattern and transmitting an instruction indicative of the action (Section 4.1, Pages 33-35; Section 5.2.2, Pages 53-57; Section 5.3.3, Pages 68-71; Section 5.3.5, Pages 73-75; Figures 10, 20).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for collectively managing management information about a

Art Unit: 3623

plurality of consumer devices and managing the operations of the consumer devices as taught by Gill et al. would have benefited from checking and detecting inconsistency if an event corresponding to the condition of each consumer device does not match registered event management information in view of the teachings of Zhang; the resultant system/method enabling the system/method analyzing and correlating alarms/events to existing management patterns as well as creating new management patterns when the alarms/events do not match (correlated) with pre-existing management patterns (Zhang: Page 33, step 60.0; Figure 10, steps 60.0, 80.0, 90.0).

Neither Gill et al. nor Zhang expressly teach checking if there is an inconsistency in an event order or adding an alerting instruction to the action that should be performed when the inconsistency in the event order is determined as claimed.

Klemettinen et al. teach checking if there is an inconsistency in an event (alarm) order (temporal sequences, correlation pattern, serial episode rules, Telecommunication Alarm Sequence Analyzer, TASA; Paragraphs 1, 3-4, Page 400; Paragraph 1, Page 402; Section 3.2, Pages 403-405; Figures 4, 6) in an analogous art of monitoring and managing a plurality of network devices (Abstract; Paragraph 3, Page 396; Figure 2) for the purposes of correlating event/alarms in order to perform such tasks as alarm/event filtering, identification of faults and/or suggestions for corrective actions (Paragraph 2, Page 396; Paragraph 1, Page 399).

Klemettinen et al. further teach a system and method for monitoring and managing the operations of a plurality of devices comprising:

- creating/registering and storing a plurality of device, event and alarm information (Section 2.3, Pages 401-402; Figures 2, 4);
- correlating events/alarm messages with a plurality of management and device condition information (e.g. event/alarm patterns; Paragraphs 1,3-4, Page 400; Paragraph 1, Page 402) in order to select an action(s) to take (Figures 3-4); and
- discovering/identifying event/alarm patterns (Paragraphs 2-4, Page 396); and
- selecting an action based on the management, device and pattern information (Section 2.2, Pages 399-400; Figure 2; 6).

It would have been obvious to one skilled in the art at the time of the invention that the customer service device management system and method as taught by the combination of Gill et al. and Zhang would have benefited from checking if there is an inconsistency in an event order in view of the teachings of Klemettinen et al.; the resultant system and method enabling users to analyze a stream of events (condition information, alarms) correlating event/alarms to temporal/sequential patterns via event order dependent correlation rules in order to perform such tasks as alarm/event filtering, identification of faults and/or suggestions for corrective actions (Klemettinen et al.: Paragraph 2, Page 396; Paragraph 1, Page 399).

While the correlation of events (faults, traps, errors, etc.) based on the type of device, the device's identifier and event/fault patterns is old and very well known Gill et al. does not expressly utilize the phrase pattern as claimed.

Both Zhang and Klemettinen et al. teach selecting an action based on device condition information, an occurred event, a device number and a *management pattern corresponding* to the event (Zhang: Bullets 3-4, 6, 9, Page 13; Steps 10.0-50.0, Page 33; Pages 55-56; Figures 10, 20; Klemettinen et al.: Section 2.2, Pages 399-400; Figure 2; 6) in analogous art of monitoring and managing a plurality of customer service devices for the purposes of identifying/recognizing different types of alarms and/or suppress low-level alarms (Zhang: Paragraph 1, Page 56).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for managing and monitoring the operations of a plurality of networked customer service devices as taught by Gill et al. would have benefited from utilizing management patterns, device number and event information to select an action in view of the teachings of both Zhang and Klemettinen et al.; the resultant system/method enabling users to identify/recognize different types of alarms and/or suppress low-level alarms (Zhang: Paragraph 1, Page 56).

Regarding Claims 3 and 4 Gill et al. teach that the management system further comprises creating (entering, inputting) and registering (making available to the system,

Art Unit: 3623

associating) the action(s) corresponding to each condition for each customer device (action procedure connected to fault actions, action list, action procedure, action message, Device Status Processing Program; Column 11, Lines 50-68; Column 25, Lines 5-62; Figures 28, 29 and 31; Figures 1, 4 and 8).

Regarding Claim 5 Gill et al. teach that the management system further comprises (trouble tickets, responses, actions, action procedures; Column 12, Lines 33-44; Column 25, Lines 5-60; Column 37, Lines 16-60; Column 34, Lines 1-15; Column 36, Lines 53-68; Figures 26 and 31-32; Figures 4, 7 and 8):

- selecting a customer service device corresponding to the supplied condition (status, fault, solicited message, unsolicited message, etc.) from among a plurality of customer service devices; and

- selecting (responding) the action corresponding to the supplied condition information among a plurality of actions registered for the customer service device.

Regarding Claim 6 Gill et al. teach that the management system further comprises (Column 12, Lines 33-44; Column 25, Lines 5-60; Column 37, Lines 16-60; Column 34, Lines 1-15; Column 36, Lines 53-68; Figures 26 and 31-32; Figure 4):

- receiving and judging (reviewing, filter/identify/map, deciding, determining) a plurality of types of condition information (fault codes, fault category, fault condition, fault signals, fault message) in their entirety; and

Art Unit: 3623

- selecting the action corresponding to the judging (filter/identify/map) from among a plurality of actions registered (available) in the system.

Regarding Claim 7 Gill et al. teach that the management system further comprises (Column 12, Lines 33-44; Column 31, Lines 1-60; Column 34, Lines 1-15; Column 36, Lines 53-68; Figures 18, 23, 25, 26 and 36):

- registering (storing, saving, logging, collecting) a plurality of information, historical and current, regarding the condition information (faults, messages, calls, trouble tickets, actions, etc.) for customer service devices; and

- selecting the action corresponding to the plurality of condition information, historical and current available (registered in the system).

Regarding Claim 8 Gill et al. teach that the management system further comprises (Abstract; Column 5, Lines 10-54; Column 9, Lines 60-68; Figures 19 and 24-26):

- instructing (requesting, requiring, contacting) a maintainer (servicer) of the plurality of customer service devices to perform a maintenance (service) operation according to the condition information; and

- receiving information about a results of the maintenance (service) operation from the maintainer (servicer).



Art Unit: 3623

Regarding Claim 9 Gill et al. teach that the management system enables a plurality of users (entities) to receive, send, enter, maintain and the like a plurality of information related to the operation of customer service devices. More specifically Gill et al. teach that an administrator and a maintainer (servicer, vendor) supply information to the management system (Abstract; Column 29, Lines 45-68; Column 31, Lines 45-55).

**Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Poliquin et al., U.S. Patent No. 5,696,486, teach a system and method for managing the operations of a plurality of networked/distributed devices comprising correlating event, device condition and management information to transmit instructions indicative of actions to be taken to resolve the alarm.
- Fuji et al., U.S. Patent No. 5,892,898, teach a system and method for managing the operations of a plurality of networked customer service devices (event

Art Unit: 3623

management) for identifying and logging detailed error information in response to receiving device events.

- Faigon et al., U.S. Patent No. 6,006,016, teach a network fault correlation system and method for managing a plurality of networked devices comprising matching device fault events and selecting an action in response to occurred event, device and fault information to resolve the faults. Faigon et al. further teaches detecting mismatches between event/fault or device or pattern information.

- Rowles et al., U.S. Patent No. 6,252,852, teach a system and method for managing and monitoring the operations of a plurality of networked devices comprising selecting an action in response to device, condition and pattern information (pattern matching).

- Kulatunge et al., U.S. Patent No. 6,353,902, teach a system and method for device fault prediction and proactive maintenance wherein the system utilizes known alarm correlation systems/techniques (Telecommunications Alarm Sequence Analyzer, TASA) to correlate occurred event, device and management pattern information in order to select an action to resolve the event/fault.

- Ditmer et al, U.S. Patent No. 6,473,407, teach a fault and alarm management system and method for managing a plurality of networked devices.

- Tentij et al., U.S. Patent No. 6,513,129, teach a system and method for managing and monitoring a plurality of networked devices comprising a fault management system wherein a plurality of device, condition and alarm information is

Art Unit: 3623

utilized to select an action to resolve the alarm and transmitting instructions indicative of the selected action.

- Dickey et al., U.S. Patent No. 6,647,517, teach a network device management and monitoring system and method wherein the order of occurred events (errors) is determined.

- Perry et al., U.S. Patent No. 7,020,696, teach a system and method for managing the operations of a plurality of network customer service devices comprising a fault management system and method for identifying and acting upon device faults.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Scott Jarrett  
Asst. Examiner  
June 1, 2007

Beth Van Doren  
Beth Van Doren  
AU 3623  
Primary Examiner